

#17M And B 10.2982

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Confirmation No. 3378

Mitsuaki OSHIMA et al.

Docket No. 2000 1420

Serial No. 09/686,467

Group Art Unit 2634

RECEIVED

Filed October 12, 2000

Examiner A. Le

OCT 2 8 2002

Technology Center 2600

COMMUNICATION SYSTEM

AMENDMENT

THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

Assistant Commissioner for Patents, Washington, D.C.

Sir:

In response to the Office Action of April 24, 2002, the period for response to which having been extended by three months to October 24, 2002, please amend the above-identified U.S. patent application as follows:

IN THE CLAIMS:

Please cancel claims 13-21 without prejudice or disclaimer to the subject matter therein.

Please add claims 22-29 as follows:

22. A signal transmission apparatus comprising:

- a modulator operable to modulate a carrier wave with an input signal to produce a modulated signal, and

- a transmitter operable to transmit the modulated signal.

said input signal containing a first data stream including g values of bit patterns and a second data stream, where g is an integer number, and

the modulated signal having symbols, each of which is representing one of m signal points in a vector space diagram, where m is an integer number and the vector space diagram includes an I axis and a Q axis extending in directions perpendicular to each other.

BIX